

CLAIMS

[1] An agent or a transplant for enhancing the migration and accumulation of mesenchymal stem cells in an injured tissue and/or suppressing the diffusion of mesenchymal stem cells from an injured tissue.

[2] The agent or transplant according to claim 1, which contains a mesenchymal stem cell migration-enhancing factor.

[3] The agent or transplant according to claim 2, which contains a mesenchymal stem cell migration-enhancing factor that enhances the proliferation of mesenchymal stem cells.

[4] The agent or transplant according to any one of claims 1-3, which is used in regeneration therapy.

[5] The agent or transplant according to claim 4, which is used in a regeneration therapy of injured tissue resulting from osteoarthritis, bone fracture, loss of alveolar bone or jaw bone, cerebral infarction, myocardial infarction, or lower limb ischemia.

[6] The agent or transplant according to any one of claims 2-5, wherein the mesenchymal stem cell migration-enhancing factor is selected from the group consisting of EGF (epidermal growth factor), HB-EGF (heparin-binding epidermal growth factor), TGF- α , thrombin, PDGF (platelet-derived growth factor), FGF (fibroblast growth factor), hyaluronic acid, IGF (insulin-like growth factor), and HGF (hepatocyte growth factor).

[7] The agent according to any one of claims 1-6, which is administered simultaneously with, or continuously to, or

separately from mesenchymal stem cells.

[8] The transplant according to any one of claims 1-6, which is administered simultaneously with, or continuously to, or separately from mesenchymal stem cells.

[9] A method of regeneration therapy for injured tissue which comprises either enhancing the migration and accumulation of mesenchymal stem cells in the injured tissue and/or suppressing the diffusion of mesenchymal stem cells from the injured tissue.

[10] The method according to claim 9, which comprises administering a mesenchymal stem cell migration-enhancing factor.

[11] The method according to claim 9 or 10, wherein the injured tissue results from osteoarthritis, bone fracture, loss of alveolar bone or jaw bone, cerebral infarction, myocardial infarction, or lower limb ischemia.

[12] The method according to claim 10 or 11, wherein the mesenchymal stem cell migration-enhancing factor is selected from the group consisting of EGF, HB-EGF, TGF- α , thrombin, PDGF, FGF, hyaluronic acid, IGF, and HGF.

[13] The method according to any one of claims 10-12, wherein the mesenchymal stem cell migration-enhancing factor is administered topically to the injured tissue.

[14] The method according to claim 13, wherein the mesenchymal stem cell migration-enhancing factor is administered by injection.

[15] The method according to claim 13, wherein the mesenchymal stem cell migration-enhancing factor is applied

over the injured tissue.

[16] The method according to any one of claims 10-15, wherein mesenchymal stem cells are administered to the injured tissue simultaneously with, or continuously to, or separately from the administration of the mesenchymal stem cell migration-enhancing factor.